Appln. No. 09/346,283
Amendment dated March 7, 2005
Reply to Office Action mailed January 11, 2005

REMARKS

Reconsideration is respectfully requested.

Entry of the above amendments is courteously requested in order to place all claims in this application in allowable condition and/or to place the non-allowed claims in better condition for consideration on appeal.

Claims 1 through 7 and 12 through 27 remain in this application.

Claims 8 through 11 have previously been cancelled. No claims have been withdrawn or added.

Paragraphs 1 through 4 of the Office Action

Claims 1 through 2, 7, and 12 through 18, 22, 25 and 26 have been rejected under 35 U.S.C. §102(b) as being anticipated by Kusunoki (US Pat. No. 5,324,980).

Claims 3 through 6, 19 through 21, 23 and 24 have been rejected under 35 U.S.C. Section 103(a) as being unpatentable over Kusunoki (US Pat. No. 5,324,980) in view of Holm et al. (US Pat. No. 5,501,990).

Turning first to the "Response to Arguments" portion of the final Office Action, it is stated that "the pending claims must be given their broadest reasonable interpretation consistent with the specification" and that (emphasis in original):

[i]n the instance case, the broadest reasonable interpretation for the term "a semiconductor support substrate" is any substrate supporting a semiconductor structure. Kusunoki, as stated before, does teach the limitation in Figure 20F by showing substrate (901b) supporting a semiconductor structure (consider layers 922, 915, 902, and 916). Therefore, the rejection is considered to be proper.

However, assuming for the purpose of argument only that the interpretation of the requirement "a semiconductor support substrate" given in the Office Action is truly the "broadest reasonable interpretation", the interpretation

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cannot be in contravention of the explicit requirements of the claim language. In particular, claim 27, added in the response to the previous Office Action, requires "wherein said semiconductor support substrate is formed of a semiconductor", which is in direct contradiction to the interpretation of "semiconductor support substrate" as including "any substrate supporting a semiconductor structure". Clearly, the language of claim 27 does not support the interpretation of "semiconductor support substrate" as being "any substrate", as the language requires that the substrate is formed of a semiconductor". Therefore, even if one is of the opinion that the broadest reasonable interpretation of "semiconductor support substrate" includes "any substrate", it is submitted that this interpretation cannot apply to the requirement of claim 27 that the "semiconductor support substrate is formed of a semiconductor".

In fact, the final Office Action does not address the requirements of claim 27, and does not explicitly reject claim 27. It is therefore submitted that claim 27 is allowable over the prior art.

However, even in light of the above, it is not necessarily conceded that the interpretation of "any substrate supporting a semiconductor structure" that is asserted in the Office Action as the "broadest reasonable interpretation" for "semiconductor support surface" is in fact consistent with the specification of the present patent application.

In particular, independent Claim 1 recites "a semiconductor support substrate" (emphasis added). This may be illustrated, for example, by the specification at page 6, lines 1 through 2, where it states "[s]imilarly the logic or microprocessor is formed in the semiconductor substrate, using well known processing techniques" (emphasis added), as well as the showing in Figure 1 of the drawings. Still further, in the specification at page 8, lines 6 through 13 (emphasis added):

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The integrated circuit 2 comprises a support element 4 comprising any semiconductor-based structure having an exposed surface with which an integrated circuit structure of the present invention may be formed. The term "substrate" may include one or more layers that have been fabricated into a sheet or support, and may include other functional layers fabricated thereon. For example, but without limitation of this concept, doped and undoped semiconductors, epitaxial semiconductor layers supported by a base semiconductor or insulator, as well as other semiconductor structures may be used.

In other words, the "semiconductor support substrate," as recited in Claim 1, is a semiconductor.

In rejecting independent Claim 1, the Patent Office has analogized the layer 901b in FIG. 20F of Kusunoki to the foregoing indicated element (Office Action, page 2). Applicant respectfully disagrees.

As indicated in Kusunoki, "a substrate 901b of a transparent material such as quartz is formed on the display 922" (emphasis added) (col. 25, lines 7 through 9). In other words, the substrate 901b is comprised of a transparent material such as quartz. It is well known that quartz is composed of silica (i.e., silicon dioxide, chemical formula SiO₂), which is not a semiconductor. In comparison, silicon (chemical formula Si) is a semiconductor. Thus, the substrate 901b of Kusunoki cannot be "a semiconductor support substrate," as recited in claim 1. Because Kusunoki fails to teach, disclose, or suggest the element of "a semiconductor support substrate," as claimed in claim 1, the rejection of claim 1 should be withdrawn, and the claim 1 should be allowed.

Claims 2, 7, 22 and 27 depend from claim 1 and are therefore allowable due to their dependence.

Independent claims 12 through 13 and 25 through 26 were essentially rejected based on the same rationale as applied to claim 1. Since claim 1 is allowable, claims 12 through 13 and 25 through 26 should also be allowed.

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Claims 14 through 18 depend from claim 13 and are therefore allowable due to their dependence.

Further, neither Kusunoki (as indicated in the foregoing discussion) nor Holm teaches, discloses, or suggests the element of "a semiconductor support substrate", as claimed in claim I, independent claim 1 is therefore allowable. Claims 3 through 6 and 23 through 24 depend from claim 1 and are therefore allowable due to their dependence.

Withdrawal of the §102(b) and §103(a) rejections of claims 1 through 7 and 12 through 27 is therefore respectfully requested.

CONCLUSION

In light of the foregoing remarks, early reconsideration and allowance of this application are most courteously solicited.

Respectfully submitted,

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